

**IN THE CLAIMS:**

Kindly cancel claims 13-28 and 34-39 without prejudice or disclaimer. Kindly amend claims 1, 31 and 33 as follows. A detailed listing of all claims is as follows.

Claim 1 (Currently Amended): A transfective liquid crystal display, comprising:

- upper and lower substrates facing into and spaced apart from each other, wherein the upper and lower substrates include a plurality of pixel regions that display images;
- a liquid crystal layer interposed between the upper and lower substrates, wherein the liquid crystal layer has a first adjusted thickness to compensate ~~an~~ a residual optical retardation of incident light caused by anchored liquid crystals near an alignment layer when a maximum operation voltage is applied;
- an upper quarter wave plate (QWP) on the upper substrate, wherein the upper quarter wave plate has a second adjusted thickness to compensate the residual optical retardation caused by the liquid crystal layer when the maximum operation voltage is applied;
- an upper polarizer on the upper quarter wave plate;
- a transparent common electrode on a surface of the upper substrate facing into the lower substrate;
- a pixel electrode over a first surface of the lower substrate, wherein the pixel electrode corresponds to each pixel region, and the pixel electrode is divided into transparent and reflective portions;
- a lower quarter wave plate (QWP) on a second surface of the lower substrate;
- a lower polarizer below the lower quarter wave plate; and
- a backlight device arranged to be adjacent to the lower polarizer.

Claim 2 (original): The transfective liquid crystal display according to claim 1, wherein the transparent portion of the pixel electrode includes a transparent electrode being disposed on a surface of the lower substrate facing into the upper substrate.

Claim 3 (original): The transfective liquid crystal display according to claim 2, further comprising a passivation layer on the transparent electrode.

Claim 4 (original): The transfective liquid crystal display according to claim 3, wherein the reflective portion of the pixel electrode includes a reflective electrode.

Claim 5 (original): The transfective liquid crystal display according to claim 4, wherein the reflective electrode is disposed on the passivation layer and has a transmitting hole in a central portion.

Claim 6 (original): The transfective liquid crystal display according to claim 1, wherein the first adjusted thickness is  $d+d_1$ , where  $d$  is a normal thickness of the liquid crystal layer and  $d_1$  is calculated using the following equation,

$$T = \sin^2 2\phi \sin^2 \left[ \frac{\pi \cdot \Delta n \cdot d_1}{\lambda} \right],$$

where  $T$  is a value of transmittance when a maximum operation voltage is applied,  $\phi$  is an angle between an optical axis of the liquid crystal layer and a transmissive axis of the

polarizer,  $\Delta n$  is a birefringence of the liquid crystal layer.

Claim 7 (original): The transflective liquid crystal display according to claim 6, wherein  $\phi$  is about 45 degrees.

Claim 8 (original): The transflective liquid crystal display according to claim 1, wherein the second adjusted thickness of the upper QWP is  $d + d_2$ , where a normal thickness of the upper QWP is  $d$  and  $d_2$  is calculated from the following equation,

$$T = \sin^2 2\phi \sin^2 \left[ \frac{\pi \cdot \Delta n \cdot d_2}{\lambda} \right],$$

where  $T$  is a value of transmittance,  $\phi$  is an angle between a slow axis of the upper QWP and a transmissive axis of the polarizer,  $\Delta n$  is a birefringence of the upper QWP.

Claim 9 (original): The transflective liquid crystal display according to claim 8, wherein  $\phi$  is about 45 degrees.

Claim 10 (original): The transflective liquid crystal display according to claim 1, wherein a slow axis of the lower QWP is perpendicular to that of the upper QWP.

Claim 11 (original): The transflective liquid crystal display according to claim 1, wherein the liquid crystal layer includes a homogeneous liquid crystal that is arranged in a vertical direction when a voltage is applied.

Claim 12 (Original): The transfective liquid crystal display according to claim 1,  
wherein the optical axis of the liquid crystal layer is parallel to the slow axis of the lower QWP.

Claims 13-28 (Canceled)

Claim 29 (Original): A transfective liquid crystal display, comprising:  
upper and lower substrates facing into and spaced apart from each other, wherein the  
upper and lower substrates include a plurality of pixel regions that display images;  
an upper quarter wave plate (QWP) on the upper substrate;  
an upper polarizer on the upper quarter wave plate;  
a lower quarter wave plate (QWP) below the lower substrate;  
a lower polarizer below the lower quarter wave plate;  
a backlight device arranged to be adjacent to the lower polarizer;  
a liquid crystal layer interposed between the upper and lower substrates;  
a transparent common electrode on a surface of the upper substrate facing into the lower  
substrate;  
an upper alignment layer between the transparent common electrode and the liquid  
crystal layer;  
a pixel electrode over the lower substrate, wherein the pixel electrode corresponds to each  
pixel region, and the pixel electrode is divided into transparent and reflective portions; and  
a lower alignment layer between the pixel electrode and the liquid crystal layer;  
wherein a transmissive axis of the upper polarizer is perpendicular to a transmissive axis

of the lower polarizer, a slow axis of the upper QWP is perpendicular to a slow axis of the lower QWP, the slow axis of the upper QWP forms an angle of  $45^\circ$  with the transmissive axis of the upper polarizer, an optical retardation of the upper QWP is  $\lambda/4+\alpha$ ,  $\alpha$  ranges from zero to 100nm, and the slow axis of the lower QWP is parallel to an orientation direction of the liquid crystal display layer.

Claim 30 (Original): The transflective liquid crystal display according to claim 29, wherein an optical retardation of the liquid crystal layer is  $\lambda/4+\alpha$ .

Claim 31 (Currently Amended): The transflective liquid crystal display according to claim 29, wherein an optical retardation of the liquid crystal layer is different between transmissive and reflective portions, the optical retardation is  $\lambda/4+\alpha$  in the reflective portion, the optical retardation is  ~~$\lambda/2+\beta$~~   $\lambda/2+\beta$  in the transmissive portion, and  $\beta$  ranges from zero to 100nm.

Claim 32 (Original): The transflective liquid crystal display according to claim 29, wherein an optimum value of  $\alpha$  for adjusting the optical retardation ranges from zero to 50nm.

Claim 33 (Currently Amended): The transflective liquid crystal display according to claim 31, wherein an optimum value of  $\beta$  for adjusting the optical retardation ranges from zero to 50nm.

Claims 34-39 (Canceled)